Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the application.

Claims 1 and 3 are amended.

Listing of Claims:

1. (Currently Amended) A switching power source apparatus comprising:

a switching output circuit for outputting a DC output voltage converted from a DC power source voltage by a semiconductor switch which is on-off controlled;

error amplifying means for comparing said DC output voltage with a reference voltage to generate a feedback signal which decreases as said DC output voltage increases;

a current detecting circuit for detecting an output current flowing through said switching output circuit to generate a current detecting signal which decreases as said output current increase; and

a PWM comparator, to which said feedback signal and said current detecting signal are inputted as comparison signals and a triangular wave signal is inputted as a reference signal, for comparing a lower signal of said comparison signals and said triangular wave signal to output a PWM signal,

wherein said semiconductor switch is on-off controlled by said PWM signal and

the current detecting circuit performs a straight current limit operation having a predetermined gradient while an output current is from a current limit operation starting current value to an output current maximum value, when the output current is beyond the current limit operation starting current value.

2. (Original) The switching power source apparatus according to claim 1,

wherein said current detecting signal is outputted through a low-pass filter.

3. (Currently Amended) [[The]] A switching power source apparatus ~~according to claim 2,~~ comprising:

a switching output circuit for outputting a DC output voltage converted from a DC power source voltage by a semiconductor switch which is on-off controlled;

error amplifying means for comparing said DC output voltage with a reference voltage to generate a feedback signal which decreases as said DC output voltage increases;

a current detecting circuit for detecting an output current flowing through said switching output circuit to generate a current detecting signal which decreases as said output current increase; and

a PWM comparator, to which said feedback signal and said current detecting signal are inputted as comparison signals and a triangular wave signal is inputted as a reference signal, for comparing a lower signal of said comparison signals and said triangular wave signal to output a PWM signal, wherein

said semiconductor switch is on-off controlled by said PWM signal and

the current detecting circuit performs a straight current limit operation having a predetermined gradient while an output current is from a current limit operation starting current value to an output current maximum value, when the output current is beyond the current limit operation starting current value,

said current detecting signal is outputted through a low-pass filter, and

said low-pass filter includes:

a resistor provided between an input side and an output side;

a capacitor between said output side and a reference point; and

a semiconductor switch for charge discharging, which is connected in parallel to said capacitor, to be turned on when a voltage on the input side becomes lower than a voltage on the output side.